



HORIZON
FITNESS

T101-08 TREADMILLS TM1040D



SERVICE MANUAL

ISSUED 2022-04-13
Updated 2026-05-11
Vietnam Factory CS
V5

TABLE OF CONTENTS

Contents

SERIAL NUMBER INFORMATION.....	4
SERIAL NUMBER LOCATION.....	4
PRODUCT RECORD.....	5
PREVENTATIVE MAINTENANCE	6
PREVENTATIVE MAINTENANCE.....	6
<i>Every Day (Daily)</i>	6
<i>Every Week (Weekly)</i>	6
<i>Every Month - Important!</i>	6
<i>Every 3 Months or 150 Miles</i>	7
TENSIONING & CENTERING THE RUNNING BELT	7
CONSOLE INSTRUCTION	9
CONSOLE OPERATION	9
DISPLAY WINDOWS.....	10
GETTING STARTED	10
PROGRAM INFORMATION.....	11
ENGINEERING MODE.....	14
ENGINEERING MODE.....	14
ENGINEERING MENU OVERVIEW	15
WORKOUT PROGRAMS OVERVIEW	17
TROUBLESHOOTING	18
GENERAL TROUBLESHOOTING	18
ELECTRICAL DIAGRAM.....	19
MCB WIRING INSTRUCTIONS.....	20
ERROR CODE TROUBLESHOOTING.....	21
No POWER TO THE CONSOLE	21
No FUNCTION FOR SAFETY KEY.....	23
INCLINE MOTOR ISSUE	23
NOISE ISSUES	24
SPEAKER/AUDIO ISSUES	25
HEART RATE FUNCTION ISSUE.....	26
PART REPLACEMENT	27
MOTOR COVER REPLACEMENT	28
REAR ROLLER REPLACEMENT	29
SIDE RAIL REPLACEMENT.....	30
RUNNING DECK REPLACEMENT	32
FRONT ROLLER REPLACEMENT	33
RUNNING BELT REPLACEMENT	34
MOTOR CONTROL BOARD (MCB) REPLACEMENT	35
MOTOR REPLACEMENT	36

TABLE OF CONTENTS

DRIVE BELT REPLACEMENT	37
INCLINE MOTOR REPLACEMENT	38
CONSOLE OVERLAY SET REPLACEMENT	40
HEART RATE BOARD REPLACEMENT	42
CHANGE LOG.....	43

Serial Number Information

Serial Number Location



Product Record

ENTER YOUR SERIAL NUMBER AND MODEL NAME IN THE BOXES BELOW:

SERIAL NUMBER:	
TM	

MODEL NAME: HORIZOI-----	TREADMILL
---------------------------------	------------------

Refer to the SERIAL NUMBER and MODEL NAME when calling for service.

Preventative Maintenance

Preventative Maintenance

Preventative maintenance is the key to smoothly operating equipment, as well as keeping the user's liability to a minimum. Equipment needs to be inspected at regular intervals. Defective components must be replaced immediately. Improperly working equipment must be kept out of use until it is repaired. Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so.

Every Day (Daily)

Clean and inspect, following these steps:

- ▶ Turn off the treadmill with the ON/ OFF switch, then unplug the power cord at the wall outlet.
- ▶ Wipe down the running belt, deck, motor cover, and console casing with a damp cloth. Never use solvents, as they can cause damage to the treadmill.
- ▶ Inspect the power cord. If the power cord is damaged, stop using and contact Customer Technical Support.
- ▶ Make sure the power cord is not underneath the treadmill or in any other area where it can become pinched or cut.
- ▶ Check the tension and alignment of the running belt. Make sure that the treadmill belt will not damage any other components on the treadmill by being misaligned.
- ▶ If any labels are damaged or illegible, contact Customer Technical Support for replacements.

Every Week (Weekly)

Clean underneath the treadmill following these steps:

- ▶ Turn off the treadmill with the ON/ OFF switch, then unplug the power cord at the wall outlet.
- ▶ Fold the treadmill into the upright position, making sure that the lock latch is secured.
- ▶ Move the treadmill to a remote location.
- ▶ Wipe or vacuum any dust particles or other objects that may have accumulated underneath the treadmill.
- ▶ Return the treadmill to its previous position

Every Month - Important!

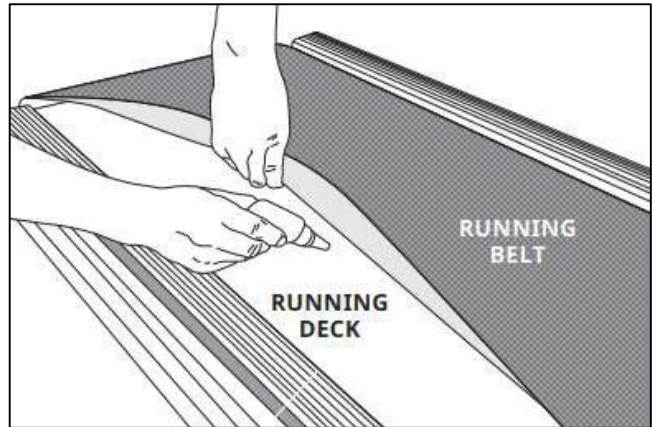
- ▶ Turn off the treadmill with the ON/ OFF switch, then unplug the power cord at the wall outlet.
- ▶ Inspect all assembly bolts of the machine for proper tightness.
- ▶ Remove the motor cover. Wait for ALL display screens to be off.
- ▶ Clean the motor and lower board area to eliminate any lint or dust particles that may have accumulated. Failure to do so may result in premature failure of key electrical components.
- ▶ Vacuum and wipe down the belt with a damp cloth. Vacuum any black/ white particles that may accumulate around the unit. These particles may accumulate from normal treadmill use.

Every 3 Months or 150 Miles

It is necessary to lubricate your treadmill running deck every three months or 150 miles (241 kilometers) to maintain optimal performance.

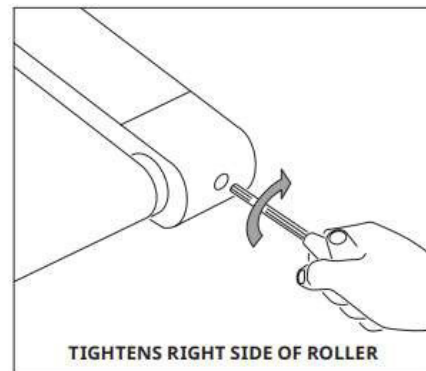
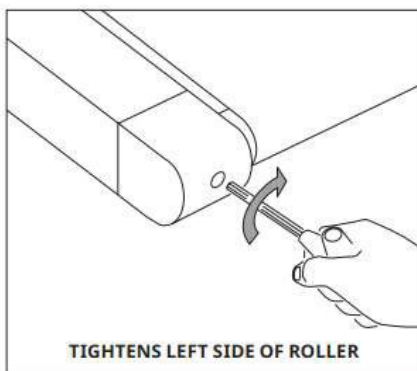
Your treadmill came with a bottle of lubricant which can be used for two applications.

- ▶ Turn off the treadmill with the on/off switch, then unplug the power cord at the wall outlet.
- ▶ Loosen both the rear roller bolts. (For best results, place two removable marks on both sides of the frame and note roller position). Once the belt is loosened, take the bottle of lubricant and apply it to the entire top surface of the running deck.
- ▶ Tighten both rear roller bolts (matching up the marks for proper position) to original position. After you have applied lubricant, plug in the power cord, insert the safety key, start the treadmill and walk on the belt or two minutes to spread the lubricant.
- ▶ Lubricate the air shocks with Teflon based spray.
- ▶ When lubrication is complete, hold the "speed up" (+) and "stop" keys for seconds. This will remove the message.



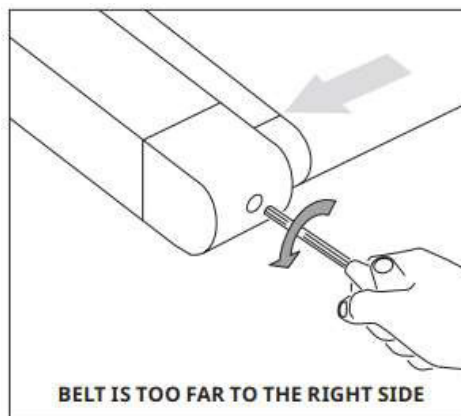
Tensioning & Centering the Running Belt

If you can feel a slipping sensation when running on the treadmill, the running belt must be tightened. In most cases, the belt has stretched from use, causing the belt to slip. This is a normal and common adjustment. To eliminate this slipping, turn the treadmill off and tension both the rear roller bolts using the supplied Allen wrench, turning them $\frac{1}{4}$ turn to the right as shown. Turn the treadmill on and check for slipping. Repeat if necessary, but never turn the roller bolts more than $\frac{1}{4}$ turn at a time. Belt is properly tightened when the slipping sensation is gone.

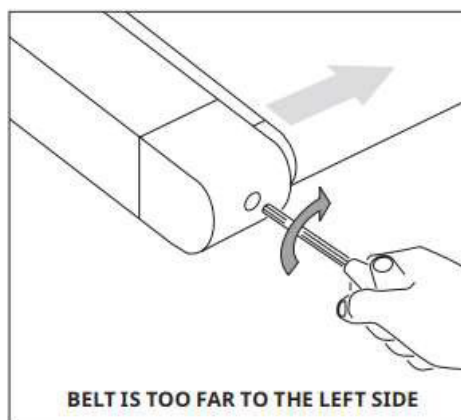


The running belt has been properly adjusted at the factory before it was shipped. At times the belt can move off-center during shipment. Before operating the treadmill, make sure the belt is centered and remains centered to maintain smooth operation.

If the running belt is too far to the right side: With the treadmill running at 1 mph, turn the left adjustment bolt counterclockwise $\frac{1}{4}$ turn at a time (using the supplied Allen wrench). Check the belt alignment. Allow belt to run a full cycle to gauge if more adjustment is needed. Repeat if necessary, until the belt remains centered during use.

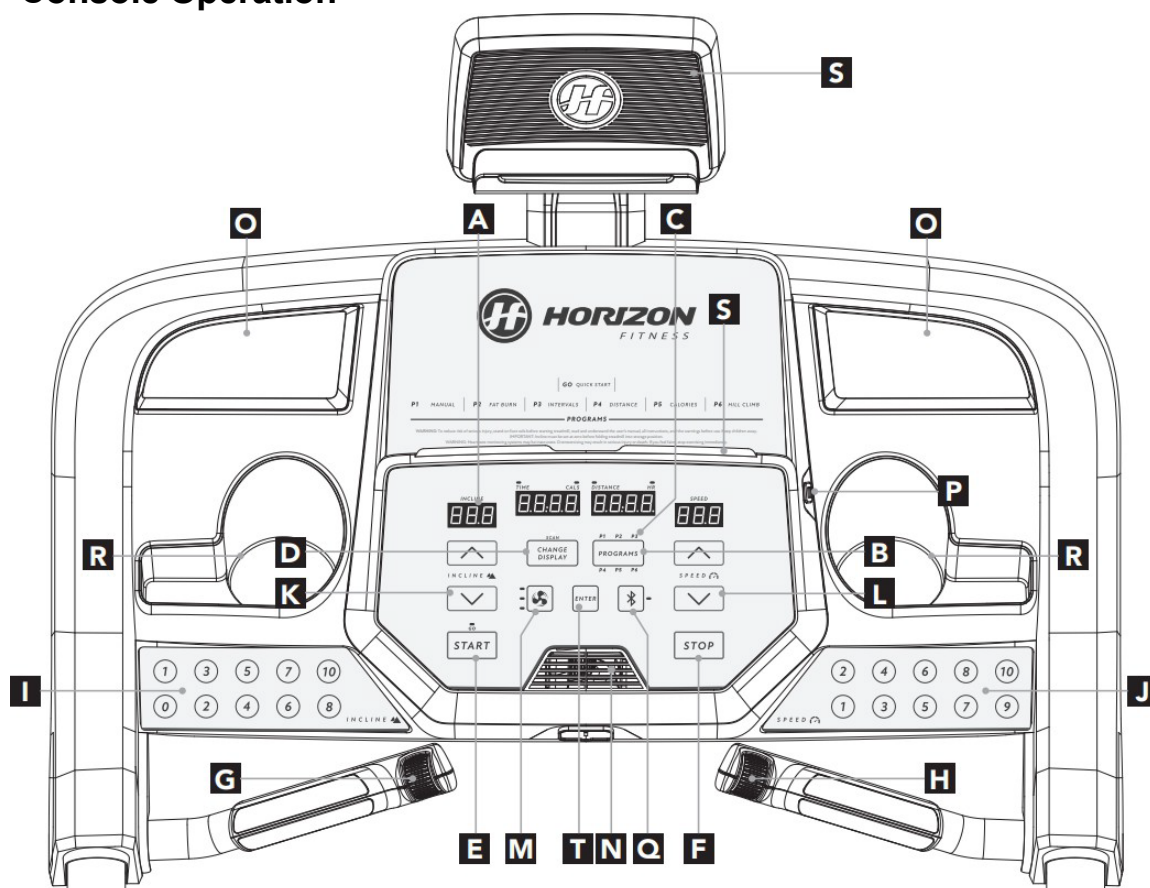


If the running belt is too far to the left side: With the treadmill running at 1 mph, turn the left adjustment bolt clockwise $\frac{1}{4}$ turn at a time (using the supplied Allen wrench). Check the belt alignment. Allow belt to run a full cycle to gauge if more adjustment is needed. Repeat if necessary, until the belt remains centered during use.



Console Instruction

Console Operation



Note: There is a thin protective sheet of clear plastic on the overlay of the console that should be removed before use.

- A) LED DISPLAY: Time, Distance, Calories, Heart Rate, Incline, Speed.
- B) PROGRAMS: Toggles through the preset programs.
- C) WORKOUT LED INDICATORS: indicates what workout is set for the current program.
- D) CHANGE DISPLAY: Toggles between TIME/CALS and DISTANCE/HR on the LED displays. When SCAN is illuminated, the displays will switch every 5 seconds
- E) START: press to START workout.
- F) STOP: press to pause/end your workout. Hold for 3 seconds to reset the console.
- G) INCLINE SCROLL WHEEL: used to adjust incline in small increments (.5%).
- H) SPEED SCROLL WHEEL: used to adjust speed in small increments (.1 MPH).
- I) INCLINE QUICK KEYS: used to reach desired incline more quickly.
- J) SPEED QUICK KEYS: used to reach desired speed more quickly.
- K) INCLINE +/- KEYS: used to adjust incline in small increments (.5%).
- L) SPEED +/- KEYS: used to adjust speed in small increments (.1 MPH).
- M) FAN KEY: press to change fan level.
- N) FAN: personal workout fan.

O) SPEAKERS: music plays through speakers when your device is connected to the console.

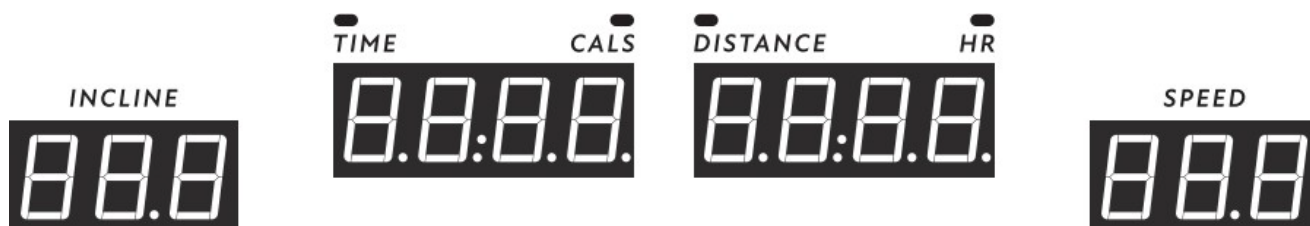
P) USB INPUT: 1A/5V USB output power.

Q) BLUETOOTH: allows a bluetooth device to be connected to the treadmill. LED will illuminate when a bluetooth device is connected.

R) WATER BOTTLE POCKETS: holds personal workout equipment.

S) TABLET/READING RACK: holds tablet or reading material.

T) ENTER KEY: Press to confirm selection



Display Windows

- INCLINE: Shown as percent. Indicates the incline of your walking or running surface.
- SPEED: Shown as MPH. Indicates how fast your walking or running surface is moving.
- TIME: Shows either the total time elapsed or remaining; depending on the workout selected.
- CALORIES (CALS): Total calories burned during your workout.
- DISTANCE: Shown as miles. Indicates distance traveled during your workout.
- HEART RATE (HR): Shown as BPM (beats per minute). Used to monitor your heart rate (displayed when contact is made with both pulse grips).

Getting Started

- 1) Check to make sure no objects are placed on the belt that will hinder the movement of the treadmill.
- 2) Plug in the power cord and turn the treadmill ON. (The ON/OFF switch is next to the power cord.)
- 3) Stand on the side rails of the treadmill.
- 4) Attach the safety key clip to part of your clothing making sure that it is secure and will not become detached during operation.
- 5) Insert the safety key into the safety keyhole in the console.
- 6) You have two options to start your workout.

A) QUICK START UP

1. Simply press the START key to begin working out.
2. Time, distance, and calories will all count up from zero. OR...

B) SELECT A WORKOUT OR TARGET

- 1) Select your PROGRAM with the +/- buttons and press ENTER when your desired PROGRAM is displayed.
- 2) Adjust the SETTING with the +/- buttons and press ENTER when your desired SETTING is displayed.
- 3) Press START to begin.

TO RESET THE CONSOLE

Hold STOP key for 3 seconds.

FINISHING YOUR WORKOUT

When your workout is complete, the unit will beep. Your workout information will stay displayed on the console for 30 seconds and then reset.

USING YOUR CD/ MP3 PLAYER/ BLUETOOTH SPEAKERS



- 1) Connect the included AUDIO ADAPTOR CABLE to the AUDIO IN JACK on the top right of the console and the headphone jack on your CD/ MP3 player.
- 2) Use your CD/ MP3 player buttons to adjust song settings
- 3) Remove the AUDIO ADAPTOR CABLE when not in use.



- 4) If you don't want to use the SPEAKERS, you can plug your headphones into the AUDIO OUT JACK on the right side of the console.
- 5) To connect to the Bluetooth speakers open your Bluetooth settings, turn on Bluetooth, scan for new devices, look for Horizon TIOI and select connect.

Program Information

PI) MANUAL: Adjust your speed and incline manually during your workout.

P2) FAT BURN: A workout designed specifically to target fat. Promotes weight loss by increasing and decreasing the speed and incline, while keeping you in your fat burning zone. Includes 10 levels.

Speed and Incline changes, segments repeat every 30 seconds.

Segment		Warm Up		1	2	3	4	5	6	7	8
Time		4:00 Mins		30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec
Level 1	Incline	0	0.5	1.5	1.5	1	0.5	0.5	0.5	1	1.5
	Speed	0.5	1.5	2	2.5	3	3.5	4	3.5	3	2.5
Level 2	Incline	0	0.5	1.5	1.5	1	0.5	1	0.5	1	1.5
	Speed	0.5	1.9	2.5	3	3.5	4	4.5	4	3.5	3
Level 3	Incline	0.5	1	2	2	1.5	1	1	1	1.5	2
	Speed	0.5	2.3	3	3.5	4	4.5	5	4.5	4	3.5
Level 4	Incline	0.5	1	2	2	1.5	1	1	1	1.5	2
	Speed	1	2.6	3.5	4	4.5	5	5.5	5	4.5	4
Level 5	Incline	1	1.5	2.5	2.5	2	1.5	1.5	1.5	2	2.5
	Speed	1	3	4	4.5	5	5.5	6	5.5	5	4.5
Level 6	Incline	1	1.5	2.5	2.5	2	1.5	1.5	1.5	2	2.5
	Speed	1	3.4	4.5	5	5.5	6	6.5	6	5.5	5
Level 7	Incline	1.5	2	3	3	2.5	2	2	2	2.5	3
	Speed	1.4	3.8	5	5.5	6	6.5	7	6.5	6	5.5
Level 8	Incline	1.5	2	3	3	2.5	2	2	2	2.5	3
	Speed	1.4	4.1	5.5	6	6.5	7	7.5	7	6.5	6
Level 9	Incline	2	2.5	3.5	3.5	3	2.5	2.5	2.5	3	3.5
	Speed	1.4	4.5	6	6.5	7	7.5	8	7.5	7	6.5
Level 10	Incline	2	2.5	3.5	3.5	3	2.5	2.5	2.5	3	3.5
	Speed	1.4	4.9	6.5	7	7.5	8	8.5	8	7.5	7

P3) INTERVALS: Improves your strength, speed and endurance by increasing and decreasing the speed throughout your workout to involve your heart and other muscles. Includes 10 levels.

Speed and Incline changes, segments repeat every 30 seconds.

Segment	Warm Up		1	2	Cool Down	
Time	4:00 Mins		90 sec	30 sec	4:00 Mins	
Level 1	0.5	1.5	2	4	1.5	1
Level 2	0.5	1.5	2	4.5	1.5	1
Level 3	0.5	1.9	2.5	5	1.9	1.3
Level 4	1	1.9	2.5	5.5	1.9	1.3
Level 5	1	2.3	3	6	2.3	1.5
Level 6	1	2.3	3	6.5	2.3	1.5
Level 7	1.4	2.6	3.5	7	2.6	1.8
Level 8	1.4	2.6	3.5	7.5	2.6	1.8
Level 9	1.4	3	4	8	3	2
Level 10	1.4	3	4	8.5	3	2

P4) DISTANCE: Push yourself and go further during your workout with 13 distance workouts. Choose from 1 mile, 2 miles, 5k, 5 miles, 10k, 8 miles, 15k, 10 miles, 20k, half marathon, 15 miles, 20 miles and marathon goals. User sets starting speed levels.

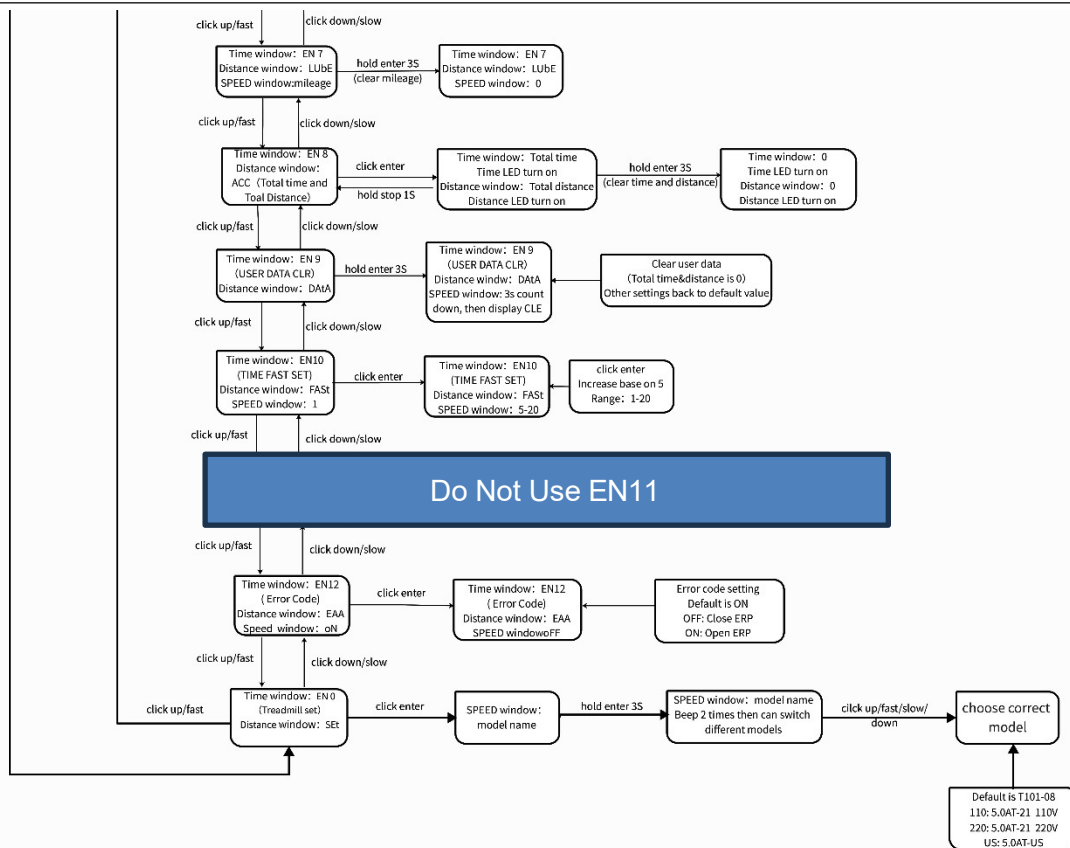
PS) CALORIES: Set goals for burning calories. Calories burned are calculated using distance and speed.

P6) HILL CLIMB: Simulates a hill ascent and descent. This program helps tone muscle and improve cardiovascular ability. Incline changes and segments repeat every 30 days.

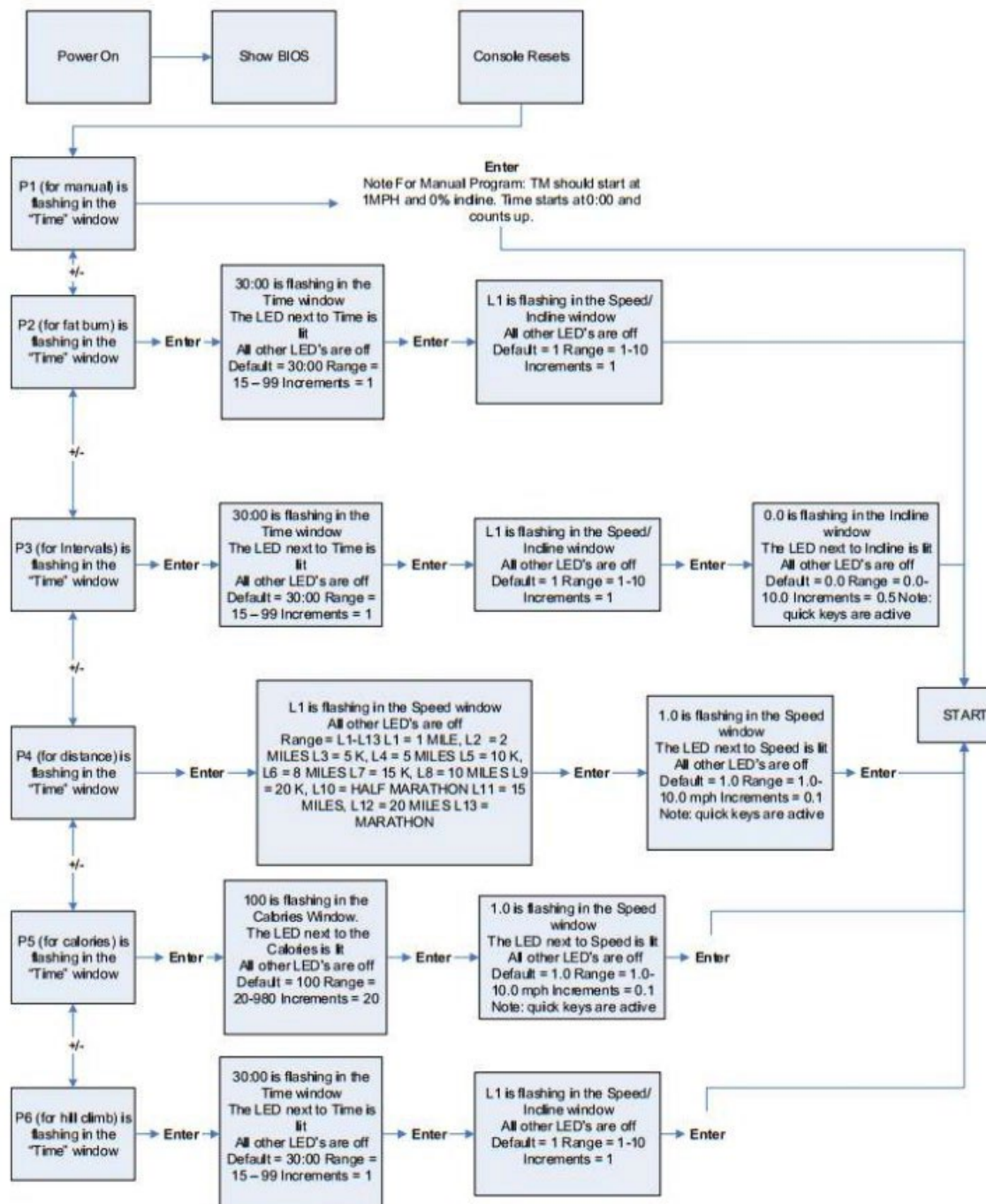
SeQment	Warm Up		1	2	3	4	5	6	7	8	9	10
Time	4:00 Mins		30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec	30 sec
Level 1	0	0	1	1.5	2	2.5	3	3	2.5	2	1.5	1
Level 2	0	0	1.5	2	2.5	3	3.5	3.5	3	2.5	2	1.5
Level 3	0	1	2	2.5	3	3.5	4	4	3.5	3	2.5	2
Level 4	0	1.5	2.5	3	3.5	4	4.5	4.5	4	3.5	3	2.5
Level 5	0	1.5	3	3.5	4	4.5	5	5	4.5	4	3.5	3
Level 6	0	1.5	3.5	4	4.5	5	5.5	5.5	5	4.5	4	3.5
Level 7	0	1.5	4	4.5	5	5.5	6	6	5.5	5	4.5	4
Level 8	0	2	4.5	5	5.5	6	6.5	6.5	6	5.5	5	4.5
Level 9	0	2	5	5.5	6	6.5	7	7	6.5	6	5.5	5
Level 10	0	2	5.5	6	6.5	7	7.5	7.5	7	6.5	6	5.5

Engineering Mode





Workout Programs Overview



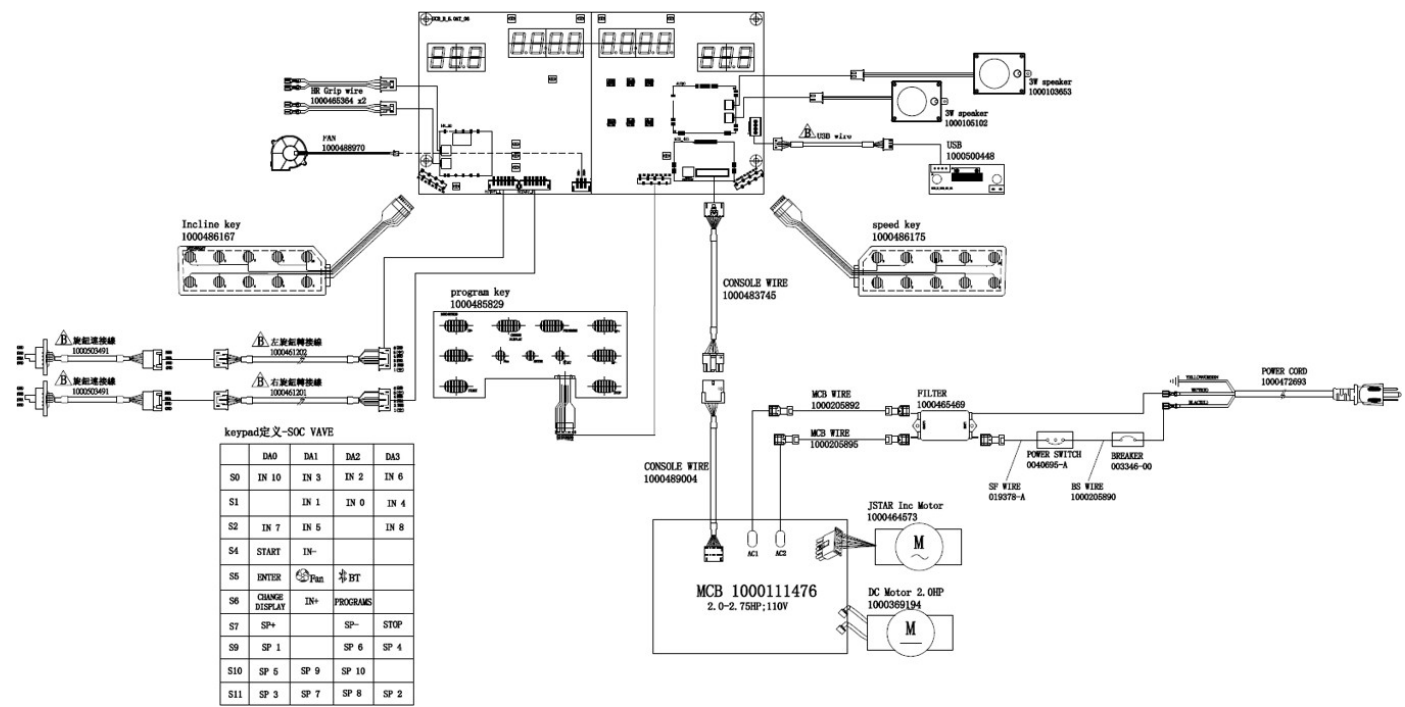
Troubleshooting

Additional resources are available on the Johnson Customer Service Portal {"CS Web": http://service.johnsonfitness.com/cs_new/login.asp) are noted through this guide (CS Web> *index tab*).

General Troubleshooting

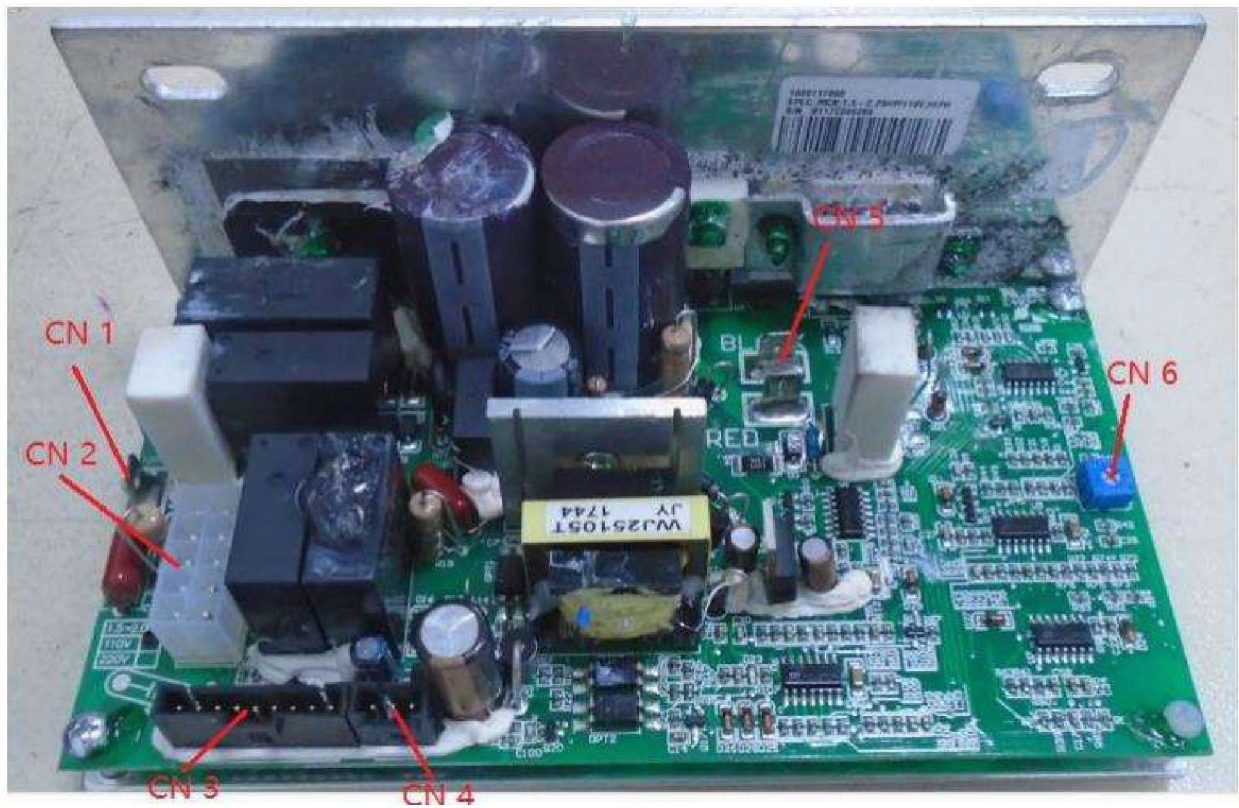
- **UPDATE TO THE LATEST SOFTWARE VERSION, if possible.**
- Cycling power is recommended as the first attempt to fix most failures, and after major repairs are implemented.
- Before replacing any major part, inspect the cables to/from it. Disconnect and inspect the connectors on both ends, as well as the terminals on the boards. If capable, use a multimeter to perform continuity tests to verify that all of the conductors are intact. If no damage/corrosion is noted, carefully reconnect the cables, ensuring proper seating and connection. Request replacement cables if at all suspicious.
- After each corrective action is taken, re-evaluate if the failure has been resolved. Some indications have a straightforward order of attempts, and not all steps are always necessary if a lower-level fix resolves the issue.

Electrical Diagram



Updated on 2025/04/10

MCB Wiring Instructions



CN 1	Power cable socket
CN 2	Elevation motor cable socket
CN 3	9 Pin console cable socket
CN 4	Speed sensor cable socket
CN 5	Drive motor cable socket
CN 6	Adjustable resistance

Error Code Troubleshooting

Error Code	Root Cause of Error code	Troubleshooting Guideline (In priority order)
E1	1. Speed sensor defective 2. Wires/cables to MCB disconnected or defective 3. Running belt rotation impaired 4. MCB defective 5. Drive motor defective	1. Check mounting of speed sensor & sensor wheel. 2. Check speed sensor cable for damage 3. Verify speed encoder cable connection to MCB 4. Remove and inspect speed sensor for lint/dust/debris on optic sensor devices, clean and re-check 5. Verify all wire and cable connections to MCB 6. Verify running belt and drive motor are free to rotate without high drag resistance or strange noises, if problem found correct before proceeding 7. Try new speed sensor 8. Try new MCB 9. Try new drive motor
E2	1. MCB defective 2. Speed encoder defective 3. Drive motor defective	1. Try new MCB 2. Try new speed encoder 3. Try new drive motor

No Power to the Console

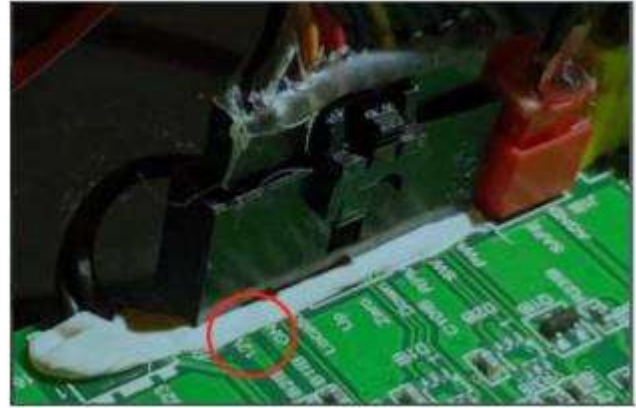
SYMPTOM:

- Turn on the power switch, but the console will not light up.

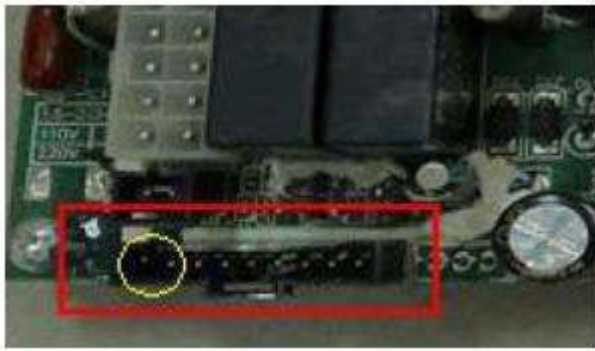
SOLUTION:

Please note the MCB in this model does NOT have an LED indicating the power is on. This means voltage measurements must be taken to find the cause of non-functioning console. Continue with each step below until the problem is found.

- Check power at the console. Measure power on pins 1 and 2 on the console cable where it connects to the console. These are the same 2 wires labelled "12V and GND" on the console PCB as seen in the red circle below. If there is approximately 12 VDC on pins 1 and 2, replace the console. If not, continue to step b.



- b. Check the MCB is providing power to the console. Measure the pins in the yellow circle in the picture below. If approximately 12 VDC is measured at these pins, replace the console cable.



- c. Check that the MCB is receiving 120 VAC. Measure the black and white wires which connect to the MCB. If there is approximately 120 VAC (+/- 15 VAC) on these wires, replace the MCB. As previously mentioned, this MCB has no indicator LED to indicate the MCB is receiving power.
- d. Check the outlet, power cord, breaker, switch, and interval wiring. If there was no AC voltage measured at the MCB in step 3, then there is a problem with the AC voltage getting to the MCB. Carefully check the building breaker, electrical outlet, power cord, treadmill breaker, treadmill power switch, and treadmill internal wiring to determine why AC voltage is not being supplied to the MCB. The technician must verify what is not functioning with voltage and continuity checks before ordering any parts to avoid sending unnecessary parts.

No Function for Safety Key

SYMPTOM:

- a. The safety key inserted in console, but display window still shows "safety key off".

SOLUTION:

- a. Check if the safety key totally inserted in the console.
If no, take off and insert again.
- b. Check if the safety key oxidized or not which will affect the conduction.
If yes, please change a new one.
- c. If the safety key is function, check the safety key sensor wires in console.
Suggest to re-connect the wires or to change new wires.

Incline Motor Issue

SYMPTOM:

- a. The incline motor does not lift up or down.

SOLUTION:

- a. Enter Engineering Mode, and scroll to ENG 1 (Hardware Test). Press the key "ENTER" first and then the key "START".
- b. Press the key "INCLINE ¹¹/v".
If can hear beeps from two relays at the MCB, the MCB is OK. Then check the connection of the elevation motor at the MCB first, try to unplug and re-plug these two pins. If cannot resolve the issue, replace the elevation motor.
If there is no beeps from these two relays, MCB is defective and replace the MCB.¹¹

Noise Issues

SYMPTOM:

- a. Thumping noise twice per rotation on new machine.
- b. Rubbing/ grinding noise.
- c. High pitched "bell-like" sound from under the motor cover.
- d. Banging or clunking sound.
- e. Slapping/ thumping / squeaking sound with each footstep.
- f. Rubbing sound underneath the treadmill.
- g. Squeaking noise when raising / lowering the deck into storage positions.
- h. Squeaking/ grinding noise when using elevation.

SOLUTION:

- a. This noise is from the roller or running belt.
 - If this is a new unit, some noise is normal as the running belt forms around the rollers.
 - Check that the belt is centered and tensioned correctly.
 - Remove and clean the rollers if needed.
 - Replace the rollers or running belt as needed.
- b. This sound is likely a moving component.
 - Remove the motor cover and check the drive belt for alignment and make sure it is not slipping or is frayed/ cut in any way. Replace the drive belt if needed.
 - Make sure the optic disk on the motor is not rubbing the speed sensor.
 - Turn the motor by hand to see if motor brushes or bearings are rubbing. Replace the motor if needed.
 - Check the front and rear rollers, replace if needed.
- c. This sound is likely caused by the optic disk.
 - Check that the optic disk is tight on the motor and not rubbing the speed sensor.
- d. The sound is likely due to the unit not being level.
 - Check that all levelers are touching the ground.
- e. Move the treadmill to another flat surface.
- f. This sound is from the running deck/ belt.
 - Check that the running deck is tightly attached to the frame.
 - Check the deck shocks for deterioration or crumbling. Replace if needed.
 - Check to see if the air shock is making this noise, lubricate or replace if needed.
- g. This sound is likely due to the air shock.
 - Lubricate or replace the air shock as needed.
- h. This sound is likely from the incline motor.
 - Check that the incline motor connection points include Teflon washers.
 - Lubricate the incline motor worm screw and connection points with grease.
 - Replace the incline motor.

Speaker/Audio Issues

SYMPTOM:

- a. No sound through the speakers but headphones work.
- b. No sound through headphones but the speakers work.
- c. No sound through speakers or headphones.
- d. Pad not charging.
- e. Speakers buzzing.
- f. Sound from one speaker only.
- g. Shock from headphones.

SOLUTION:

- a. One of the speaker boards has a bad connections or is faulty.
 - Check the connection of the wires going from the speakers to the speaker power board.
 - Check the connection of the wires going from the speaker power board to the amp board.
 - Check the connection of the wires going from the amp board to the console.
 - Replace the speaker or amp boards and wiring.
 - Replace the speakers.
 - If the speaker board, amp board, wiring, and speakers do not solve the issue, replace the console.
- b. There is a bad connection between the headphones and the console.
 - Verify the connection of the music player to the dock or audio adaptor cable.
 - Verify the audio adaptor cable connection at the console.
 - Replace the headphone jack.
 - Replace the audio adaptor cable.
- c. There is a bad connection between one of the audio boards and the console.
 - Verify the connection of the music player to the dock or audio adaptor cable.
 - Verify the audio adaptor cable connection at the console.
 - Replace the audio adaptor cable.
 - Replace the console.
- d. Speakers are not getting a clear signal through the speaker wires.
 - Check the speaker wire connections.
 - Replace the speaker wiring.
 - Replace the speakers.
- e. The speaker or speaker wiring is bad.
 - Check the speaker wire connections.
 - Switch the speaker connections from one speaker to the other to see if sound switches sides.
 - If the sound does not switch sides, replace the speaker board.
 - If the sound does switch sides, replace the speaker and speaker wires.
- f. Grounding issue.
 - Try a different set of headphones.
 - Check the grounding of the console.

Heart Rate Function Issue

SYMPTOM:

- a. The chest strap being used is not making good contact with the user's chest.
- b. The chest strap is at a low battery status.
- c. The chest strap is damaged.
- d. The HR grips are damaged.
- e. Heart rate board damaged.
- f. The UCB is damaged.

SOLUTION:

- a. Re-center the chest strap below the user's pectoral muscle and check again.
- b. Replace the battery in the chest strap.
- c. Replace the chest strap.
- d. If there is no HR present, replace the HR grips.
- e. If there is an HR present but it is much higher than normal, replace the HR board.
- f. If replacing the HR grips and board does not resolve the issues, replace the console.

Part Replacement

ESD (electrostatic discharge) damage can occur to console electronics when static buildup on people or work surfaces discharges through circuit boards or wires. For this reason, we recommend wearing a properly grounded ESD wrist strap (Figure 1) and working upon properly grounded ESD mats (Figure 2) whenever you are working on or near a circuit board. Please see the link below for an example of suitable ESD equipment for these tasks.

https://www.amazon.com/iFixit-145202-4-Portable-Anti-Static-Mat/dp/B01BLPBOS4/ref=sr_1_8?dchild=1&keywords=ESD+Mat&qid=1600353374&sr=8-8

If no ESD protection is available, refrain from touching the circuit boards as much as possible when checking connections.

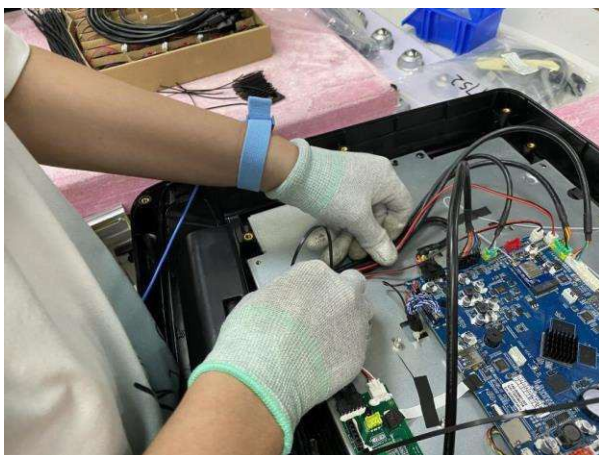


Figure 1

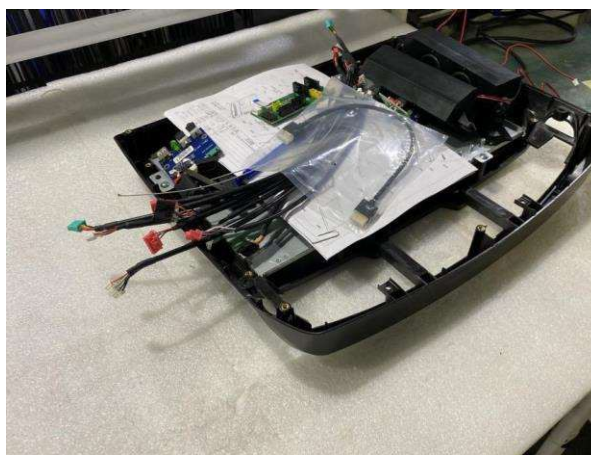


Figure 2

Motor Cover Replacement

1. Turn off and unplug the unit.

Remove the screws holding the motor cover (on 2 sides) to the frame



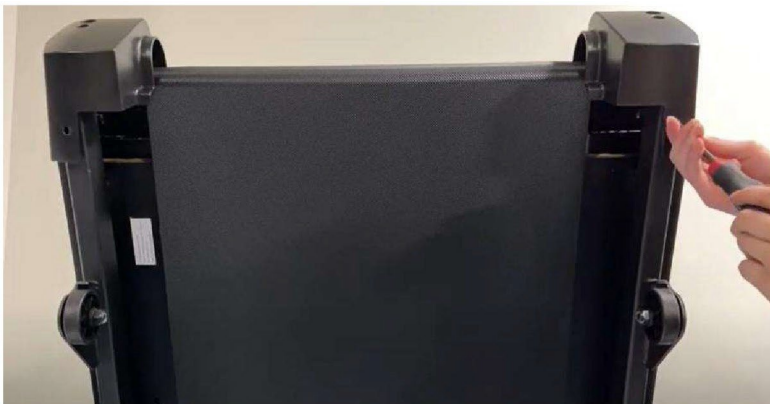
2. The cover is secured to the frame with Velcro straps, so you will have to pull up with some force.



3. Remove the motor over out of the area and replace with the new one.
4. Reverse Steps 1-3 to install a new motor cover.

Rear Roller Replacement

1. Remove the rear end cap screw.



2. Remove both roller adjustment screws.



3. Remove the roller.
4. Reverse Steps 1-3 to install a new rear roller.

Side Rail Replacement

1. Remove the screws from the underside of the deck (Figure A).



Figure A

2. Remove the rear end cap screw (Figure B).

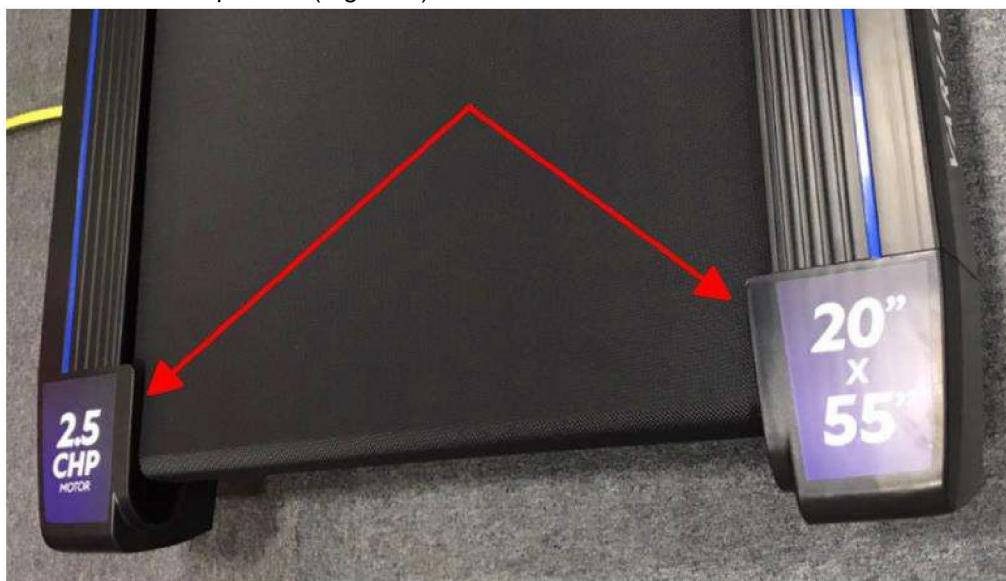
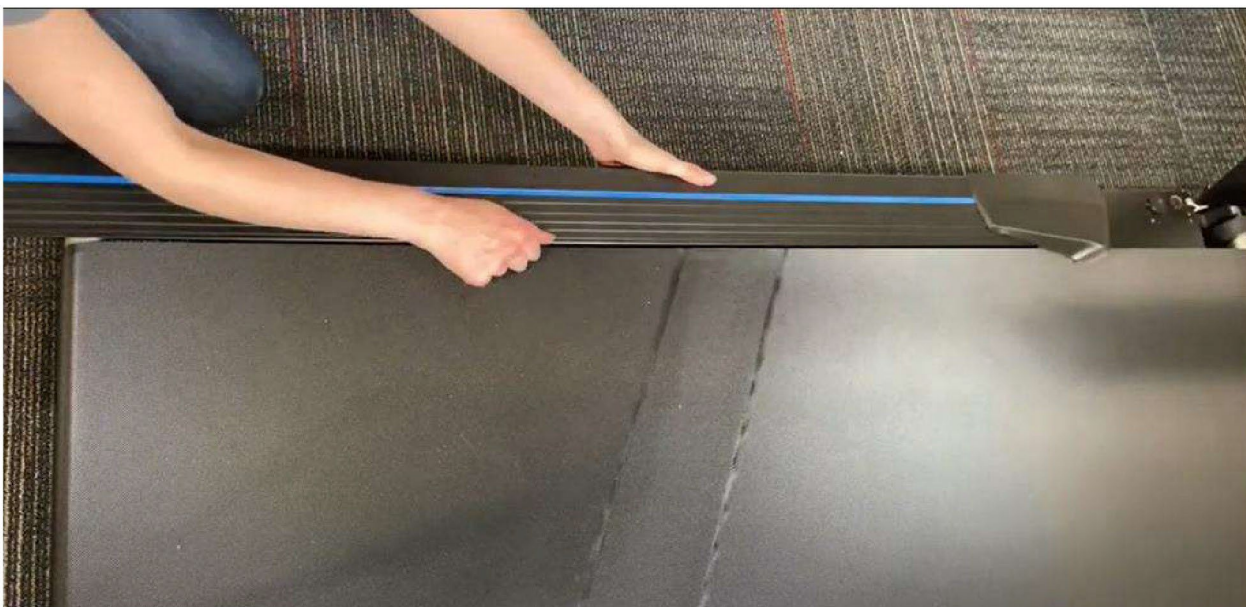


Figure B

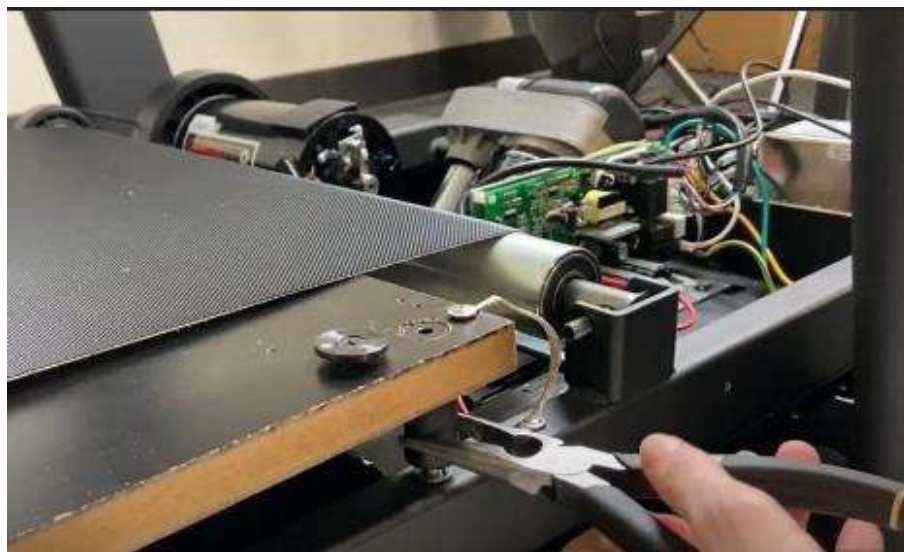
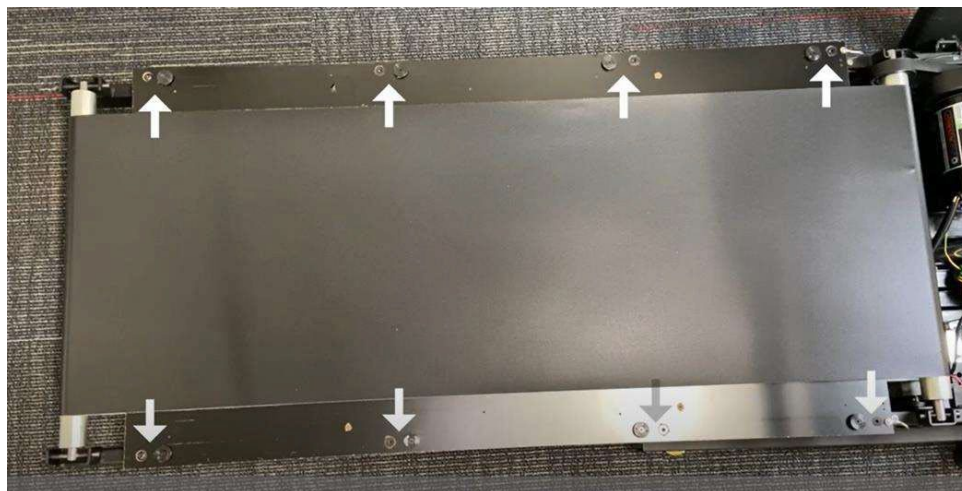
3. Remove side rail.



4. Reverse step 1-3 to install a new side rail.

Running Deck Replacement

1. Remove the motor cover as outlined as in Section of Motor cover replacement.
2. Remove the side rail as outlined as in Section of side rail replacement.
3. Remove the end cap as in above section.
4. Remove the rear roller as in Section of rear roller replacement.
5. Remove the bolts and rail locks on the running deck. The elasmotors may come lose.

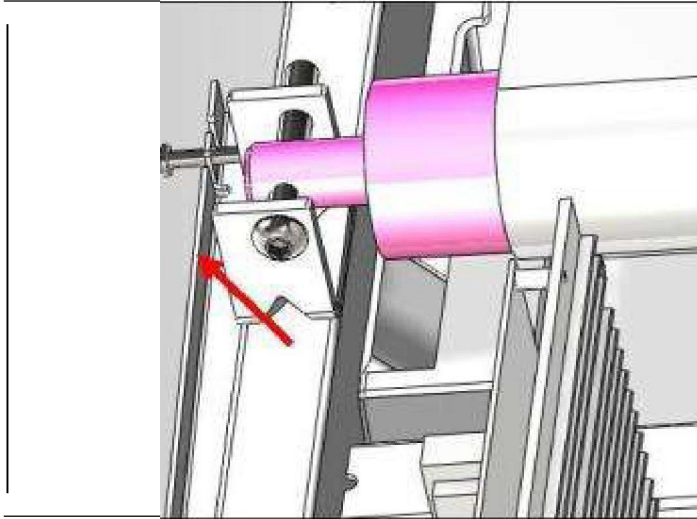


6. Remove the running deck from the running belt.
7. Reverse Steps 1-5 to install a new running deck.
8. Use the silicone oil that was included with the machine to lubricate the belt and desk. If needed, contact Customer Technical Support to purchase a new bottle of silicone oil.

NOTE: New deck surfaces must ALWAYS be matched to a new running belt.

Front Roller Replacement

1. Remove the motor cover as outlined in Section above.
2. Loosen both of the rear roller screws to remove tension from the running belt.



3. Remove the front roller screw.
4. Remove the drive belt from the front roller and remove the roller from the running belt.

Running Belt Replacement

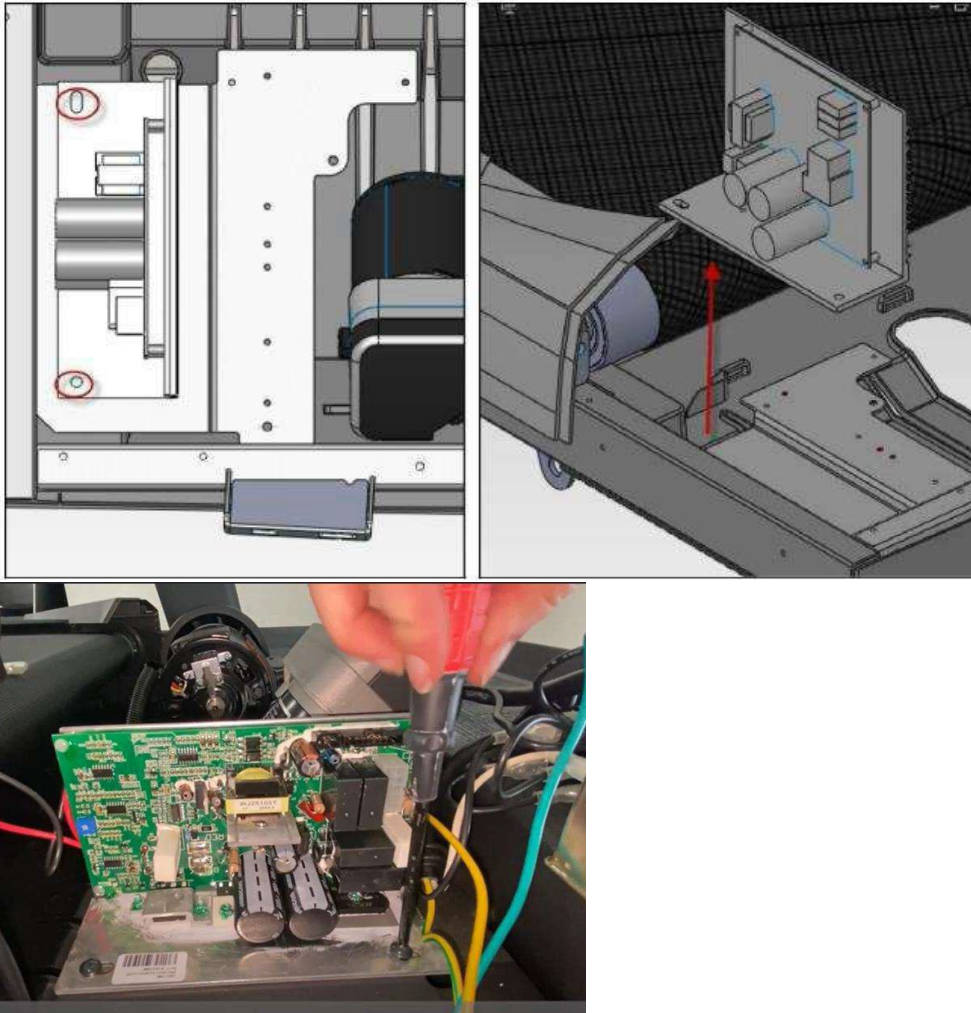
1. Remove the motor cover as outlined in Section above.
2. Remove the rear roller as outlined in Section bove above.
3. Remove the running deck as outlined in Section above.
4. Remove the front roller as outlined in Section above.
5. Remove the running belt.



6. Reverse Step 1-5 to install a new running belt.
7. Use the silicone oil that was included with the machine to lubricate the belt and deck. If needed, contact Customer Technical Support to purchase a new bottle of silicone oil.

Motor Control Board (MCB) Replacement

1. Turn off power and disconnect the cord from the machine
2. Remove the motor cover as outlined in Section above.
3. Disconnect all wires from the MCB.
4. Remove the 2 screws holding each side of the MCB to the frame and remove the faulty MCB.



5. Reverse Steps 1-5 to install a new MCB. Make sure that all wires removed during Step 3 are re-connected.

Motor Replacement

1. Turn off power to the treadmill and disconnect the power cord.
2. Remove the motor cover as outlined in Section above.
3. Walk the drive belt off the motor pulley.
4. Disconnect the motor cable ground wire from the grounding post.
5. Disconnect the motor cable from the MCB.
6. Remove the 2 screws holding the motor to the frame (Figure A).

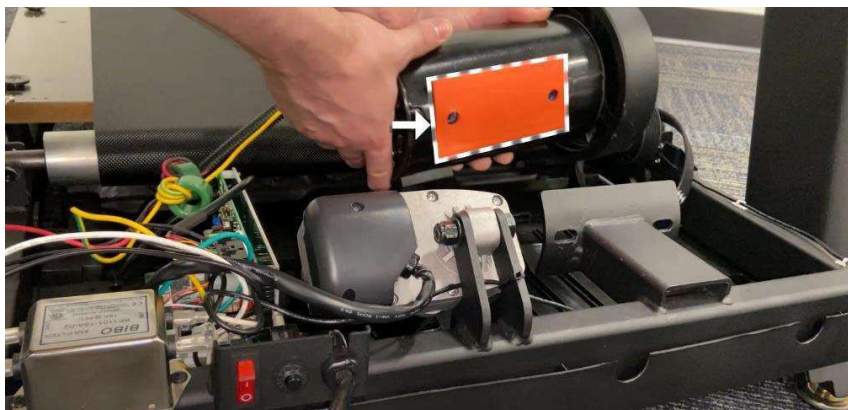


Figure A

7. Remove the motor from the treadmill
8. Reverse Steps 1-7 to install a new motor.

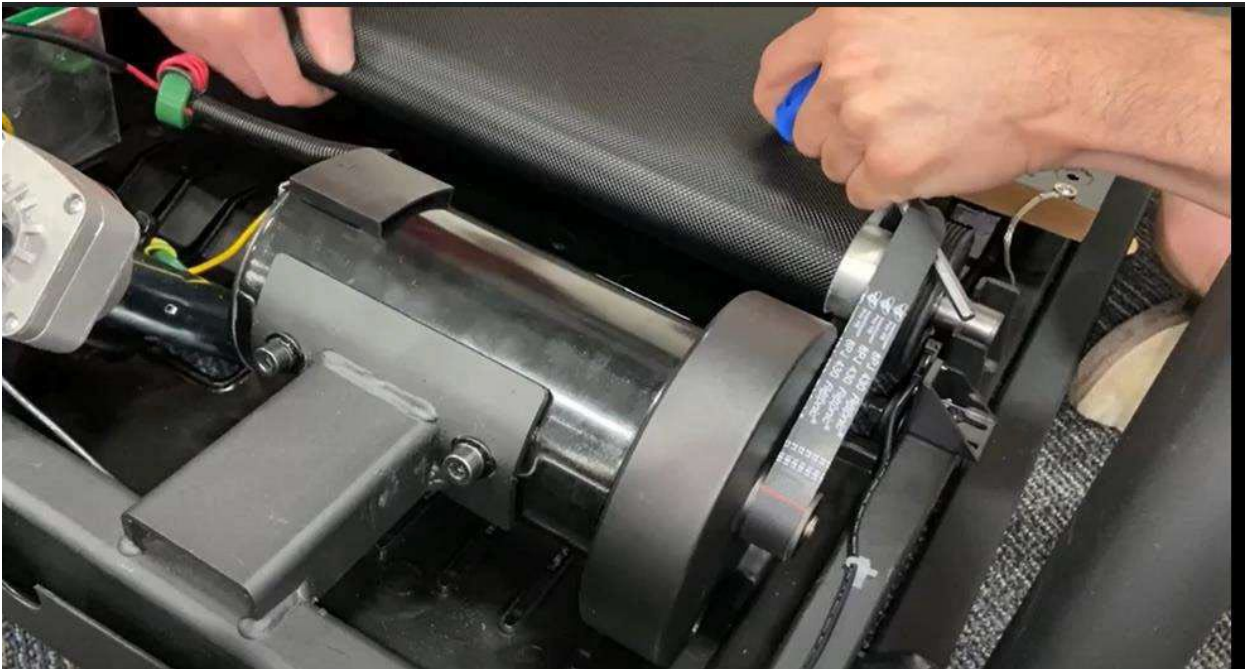
NOTE:

Be sure that the motor isolator pad is in place prior to mounting the new motor.



Drive Belt Replacement

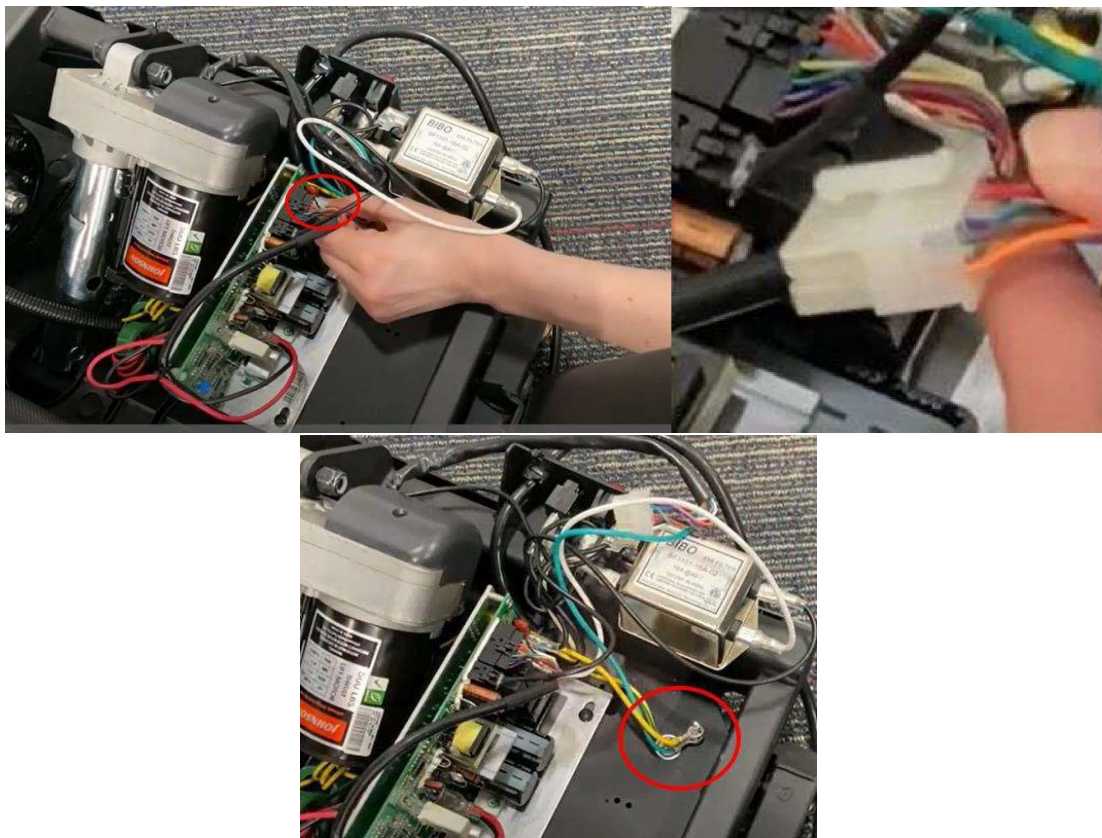
1. Turn off power to the treadmill and disconnect the power cord.
2. Remove the motor cover as outlined in Section above.
3. Walk the drive belt off the motor pulley.
4. Loosen the rear roller screws to relieve tension on the running belt.
5. Remove the two 8 mm screws from front roller.
6. Lift the roller and remove the old drive belt.



7. Reverse Steps 1-7 to install a new drive belt.

Incline Motor Replacement

1. Turn off power to the treadmill and disconnect the power cord.
2. Remove the motor cover as outlined in Section above.
3. Disconnect the incline motor cable from the MCB and the top 2 ground wires from the grounding post.



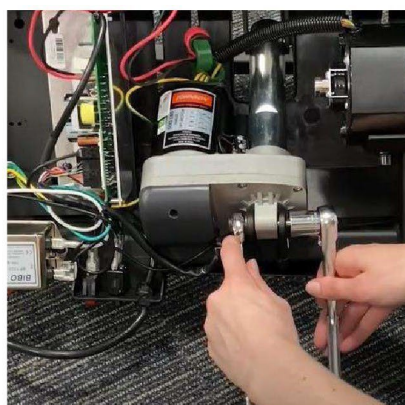
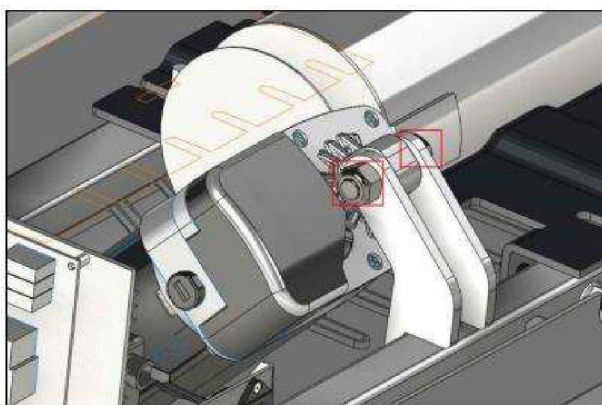
4. Place the treadmill in the folded position. Never work under the treadmill without someone present to fully secure the deck.



5. Remove the screws from the elevation rack.



6. Disconnect the incline motor from the top mounting bracket.



7. Remove the faulty incline motor and reverse Steps 1-6 to install a new incline motor.

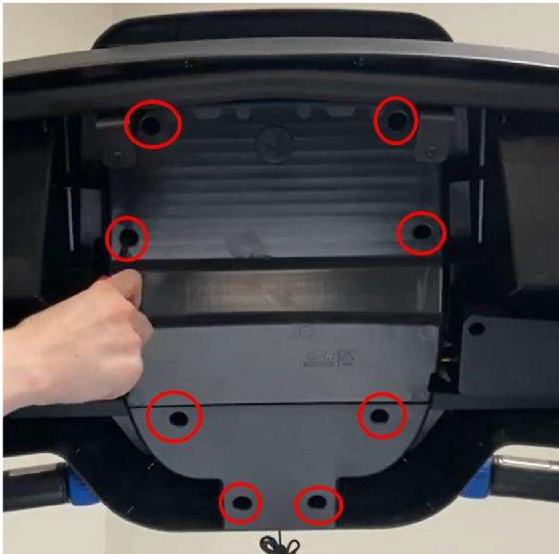
NOTE: When installing a new incline motor, make sure to replace the white nylon washers at the top and bottom connection points of the incline motor.

Console Overlay Set Replacement

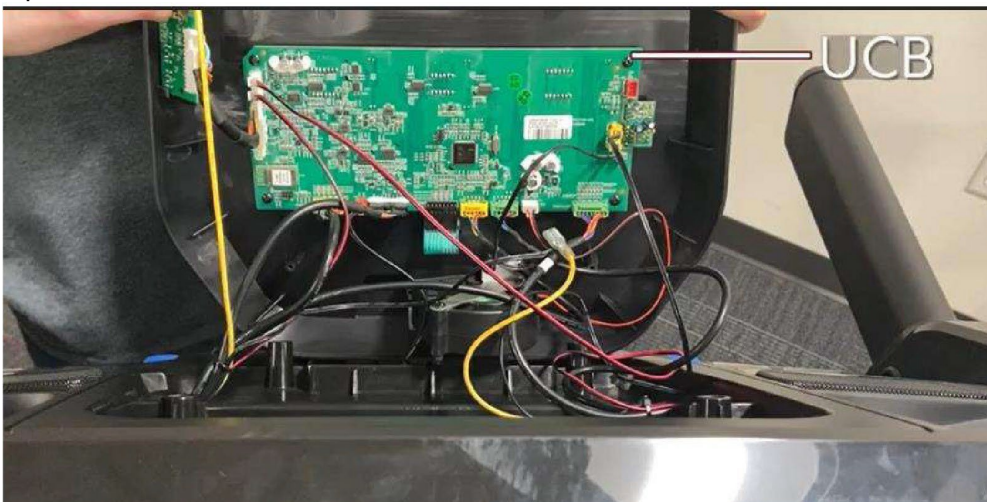
1. Unplug the unit from the wall.



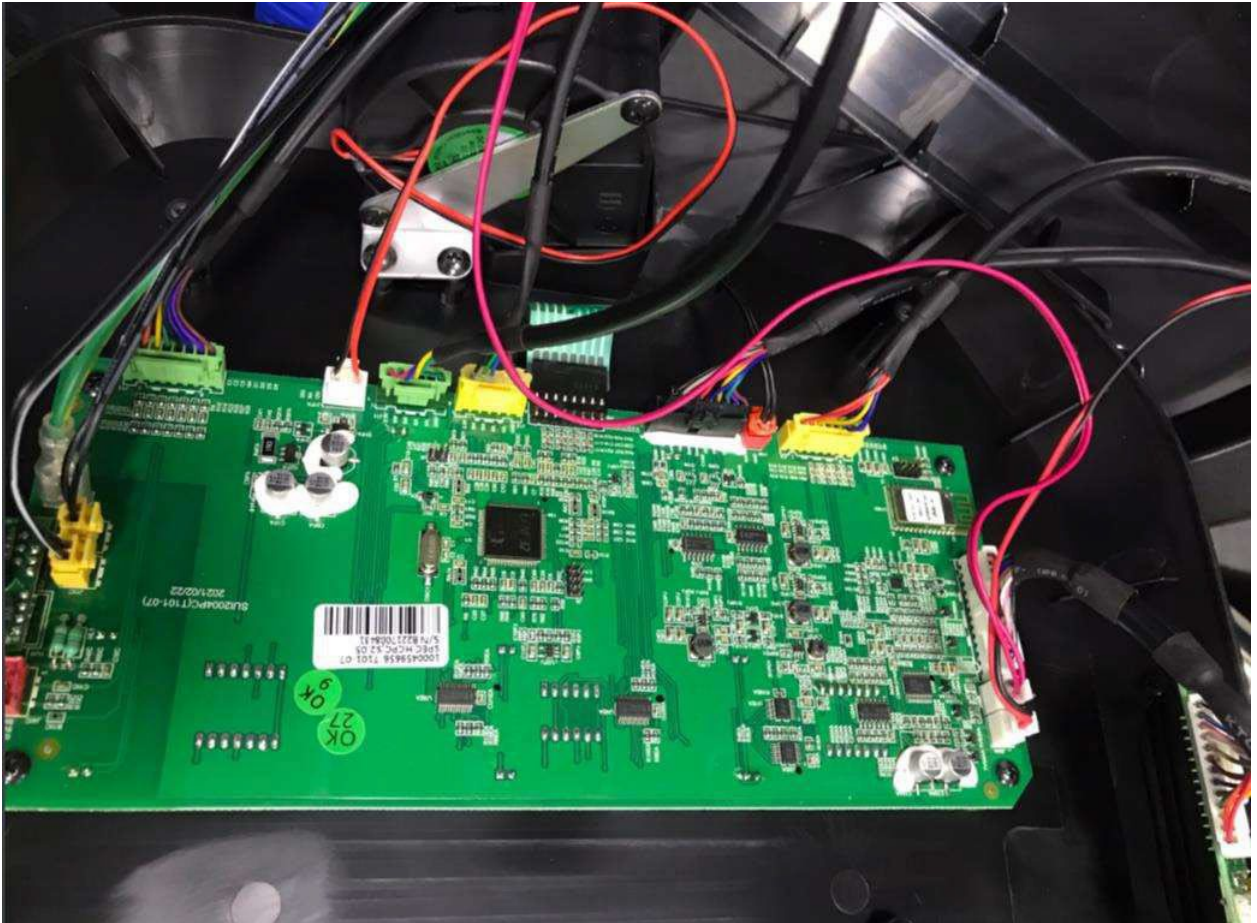
2. Remove the screws (circled in red) from the back of the console that hold the front window in place. Make sure to keep the screws.



3. Open the front of the console.



4. Take photos of the UCB and wire connections so that you can reference them when you are plugging the wires into the new board.
5. Disconnect all of the wires from the board.
6. Remove the old console overlay set and put the new one in place.



7. Plug the unit into the wall and check for proper function.
 - a. Check the Go button
 - b. Check elevation up and down
 - c. Verify speed up and down
 - d. Make sure heart rate works
 - e. Check the Stop button
8. If the unit is functioning properly, reinstall the four screws in the back of the console to secure the front window.

Heart Rate Board Replacement

1. Turn off power to the treadmill and remove the power cord.
2. Remove the console as outlined in Section 6.12
3. Loosen the screws which fix the heart rate sensor (Figure A)



4. Disconnect the wire connections that go to the heart rate board (Figure B).



5. Reverse Step 1-4 to install a new heart rate board.

CHANGE LOG

Change Log

Version	Date	Details	By
1	2022-03-8	Original Version	Claire Nguyen
2	2022-04-13	Corrected spelling	Claire Nguyen
3	2025-03-14	Added T101-08	Maxwell Anderson
4	2025-04-10	Added T101-08 Eng Mode, Console Information, Wiring Diagram	Maxwell Anderson
5	2026-02-26	Remove ENG11 from engineering mode (Don't use ENG11)	Maxwell Anderson
6	2026-05-11	Corrected the Centering the Running Belt instructions	Regina Templeton